ABSTRACT OF THE DISCLOSURE

Bookmark information having bookmark information indicative of a time corresponding to a given time series data piece for a predetermined time and state transition information indicative of a state of the time series data piece for the predetermined time is loaded, along with the time series data piece, in a database. The state transition information has one of a value indicative of an online state in which the data area is permitted to be retrieved, a value indicative of a loading state in which loading of data in the data area has not yet been completed and the data area is not permitted to be retrieved and a value indicative of a state in which data in the data area is empty. The time series data pieces for the predetermined times are loaded in a plurality of data areas of the database in sequence of times. Even during deletion or addition of data, all data retrieval requests need not be suppressed. In accordance with a data deletion request, state transition information corresponding to a data piece of interest is set to a value indicating that the data piece of interest is empty. For data retrieval, the state transition information can be read from a storage area being in online condition. Degradation of the performance of a database system caused by B tree indexing eccentrically extending in one direction owing to addition of time series data can be prevented.